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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,390	09/02/2004	Andrew Philip Parker	C4203(C)	1673

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EXAMINER	
LISTVOYB, GREGORY	
ART UNIT	**PAPER NUMBER**
1711	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/506,390	PARKER, ANDREW PHILIP	
	Examiner	Art Unit	
	Gregory Listvoyb	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ~~9/8/04~~ 3-7-05
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claim 5 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 5 the Applicant discloses " the carrier comprises one or more of water and one or more surfactants". The meaning of the above statement is unclear. The Applicant, probably means that the carrier may have water and one or more surfactants.

Claims 6 and 8 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 6 and 8 disclose "amine-containing (di)acid" and "diacid is an amine", whereas in Specification the corresponding reagent is an imine-containing diacid. For instance, in Example 1 iminodiacetic acid reacts with PEG.

Claim 9, which is dependent of Claim 6, discloses iminodicarboxylic acid, whereas Claim 8 teaches "the diacid is an amine".

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 rejected under 35 U.S.C. 102(b) as being anticipated by Makhlouf et al (US Patent 3686111) herein Makhlouf.

Makhlouf teaches an azetidinium-functional polyester.(Column 4, line 15, Column 5, line 40).

Makhlouf discloses a method of coating a substrate, such as cellulostic textile fabric in composition with a pigment (Column 7, line 30).

Claim Rejections - 35 USC § 103

Claims 1-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Carswell et al (WO 01/63037) herein Carswell in combination with Letton (US Patent 4260529) herein Letton.

Carswell teaches a azetinium-based surfactant (Page 8, line 15), which can be used, which can be used for fabric treatment in aqueous composition and in combination with other surfactants (Page 18, line 20).

Carswell does not teach that the azedinium –functional polymer is a polyester. He discloses a polyamide.

Letton discloses a cationic biodegradable polyester–based detergent composition. Letton's surfactant contains an active component, comprising Nitrogen in 5-6 membered cycle.

Since biodegrability of a detergent is a highly desirable feature, it would be obvious to replace Carswell polyamide to Letton polyester.

Claim Rejections - 35 USC § 102

Claims 6, 8 rejected under 35 U.S.C. 102(e) as being anticipated by Pereira et al (US pub 2003/0199593, Provisional Application N060/353477 filed 01.31.2002), herein Pereira.

Pereira teaches a method of preparing a polyester comprising the following steps:

a) reacting an amine-containing diacid or diol with suitable reactant (Page 1, line 0008) to form polyester

b) treating the product of step (a) with epichlorohydrin (Page 8, line 0073) .

Regarding Claims 9 and 10 diacid moiety, which may have 1 to 60 carbon atoms (Page 4, line 0.030) and diol may have 1 to 50 carbons (Page 3, line 0025).

Claim Rejections - 35 USC § 102/103

Claim 7 rejected under 35 U.S.C. 102(e) as anticipated by Pereira or, in the alternative, under 35 U.S.C. 103(a) as obvious over Encyclopedia of Polymer Science and Technology (vol 11, page 44), herein Encyclopedia

Pareira does not teach a specific catalyst during esterification (step (a)). However, it is known that esterification arte can be accelerated by acid catalyst, such as toluene sulfonic acid (Encyclopedia, vol 11, page 44).

Therefore, it would be obvious to one with average skills in the art to use toluene sulfonic acid in Parreira's process to accelerate the esterification reaction.

Claim Rejections - 35 USC § 103

Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Marans et al (US patent 3515747) in combination with Pareira.

Marans discloses polyesters based on iminodiacetic acid and diols. (Abstract). The above polyesters are especially useful as detergents, which can be used as additives in dishwashers (Column 3, line 30).

Pereira does not teach iminocarboxylic acid.

Since Maran's polymers have an excellent properties in chelating metal ions, making them very attractive as fabric softeners, it would be obvious to use Marans's imine dicarboxylic acid in Pareira's process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory Listvoyb whose telephone number is (571) 272-6105. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregory Listvoyb
Examiner
Art Unit 1711

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James J. Seidleck
Supervisory Patent Examiner
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